ABSTRACT OF THE DISCLOSURE

A speed cooking oven is disclosed comprising a cooking cavity, thermal heating source, air movement and directing means, air flow control means, an air delivery means, and a vent assembly. Hot air is circulated to and from the oven cavity via air delivery means, such that turbulently mixed glancing, conflicting and colliding gas flows mix at and about the surfaces of the food product. The turbulently mixed gas flows are spatially averaged over the surface area of the food product producing high heat transfer and moisture removal rates, thereby optimizing speed cooking of the food product.